

Notice of Allowability

Application No.

09/904,099

Examiner

John D. Ulm

Applicant(s)

SHANKAR ET AL.

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1649

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to telephone interview of 21 Nov. 2005.
2. ☒ The allowed claim(s) is/are 28-44.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☐ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

JOHN ULM
PRIMARY EXAMINER
GROUP 1600

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Claims 28 to 44 are pending in the instant application.

Claims 28, 30, 32 to 37, 43, 44, 38 to 42, 29 and 31 have been renumbered 1 to 17, respectively.

An extension of time under 37 CFR 1.136(a) is required in order to make an examiner's amendment which places this application in condition for allowance. During a telephone conversation conducted on 21 November of 2005, Alok Goel requested an extension of time for ONE MONTH(S) and authorized the Director to charge Deposit Account No. 43850 the required fee of \$60.00 for this extension and authorized the following examiner's amendment. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

The application has been amended as follows:

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

1-27. (Canceled).

28. (Currently amended) A chimeric Edg receptor selected from the group consisting of ~~Edg 1/3(et)~~, Edg 1/3(i3ct), Edg 1/3(i2i3ct), ~~Edg 5/3(i3ct)~~ and ~~Edg 8/4(et)~~ Edg 5/3(i3ct) comprising a portion of a first Edg receptor and a portion of a second Edg receptor, wherein the chimeric Edg receptor comprises:

- (a) a non-contiguous replacement of at least one intracellular domain strand of a first Edg receptor;
- (b) with a corresponding strand from a second Edg receptor.

29. (Currently amended) A nucleic acid encoding ~~the~~ a chimeric Edg receptor of ~~Claim 28~~ selected from the group consisting of Edg 1/3(i3ct), Edg 1/3(i2i3ct) and Edg 5/3(i3ct) comprising a portion of a first Edg receptor and a portion of a second Edg receptor, wherein the chimeric Edg receptor comprises:

- (a) a non-contiguous replacement of at least one intracellular domain strand of a first Edg receptor;
- (b) with a corresponding strand from a second Edg receptor.

30. (Previously presented) A cell comprising the chimeric Edg receptor of Claim 28.

31. (Previously presented) A cell comprising the nucleic acid of Claim 29.

32. (Previously presented) A method of screening for compounds that bind an Edg receptor comprising:

a) contacting the chimeric Edg receptor of claim 28 with a compound;

and

b) detecting binding of the compound to the chimeric Edg receptor
thereby identifying a compound that binds the first Edg receptor.

33. (Previously presented) A method of screening for compounds that modulate the activity of an Edg receptor comprising:

a) contacting the chimeric Edg receptor of claim 28 with a compound;

and

b) detecting modulation of the activity of the chimeric Edg receptor
relative to the activity of the chimeric Edg receptor in the absence of
the compound, thereby identifying a compound that modulates the activity of the
chimeric Edg receptor.

34. (Previously presented) The method of claim 33, wherein the activity of the chimeric Edg receptor is increased.

35. (Previously presented) The method of claim 33, wherein the activity of the chimeric Edg receptor is decreased.

36. (Currently amended) The method of claim 33, wherein the activity of the chimeric Edg ~~G-protein-coupled~~ receptor is detected by a calcium mobilization assay.

37. (Currently amended) The chimeric Edg receptor of claim 28, which couples with a Gαq protein comprising:

a) an extracellular domain of a first Edg receptor, wherein the first Edg receptor does not couple with a Gαq protein;

b) a transmembrane domain of the first Edg receptor, wherein the transmembrane domain is operably linked to the extracellular domain;

and

c) a chimeric intracellular domain comprising an intracellular strand of a second Edg receptor, wherein the intracellular strand of the second Edg receptor couples with a Gαq protein, and the chimelc intracellular domain is operably linked to the transmembrane domain.

38. (Previously presented) A chimeric Edg receptor comprising:

a) an extracellular domain of a first Edg receptor;

b) a transmembrane domain of the first Edg receptor, wherein the transmembrane domain is operably linked to the extracellular domain;

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and

c) a chimeric intracellular domain comprising a third intracellular loop and a carboxy terminal strand of a second Edg receptor, wherein the chimeric intracellular domain is operably linked to the transmembrane domain.

39. (Previously presented) The chimeric Edg receptor of claim 38, wherein the first Edg receptor is selected from the group consisting of Edg 1, Edg 5, Edg 6 and Edg 8.

40. (Previously presented) The chimeric Edg receptor of claim 38, wherein the second Edg receptor is selected from the group consisting of Edg 2, Edg 3, Edg 4 and Edg 7.

41. (Previously presented) A method of screening for compounds that bind an Edg receptor comprising:

a) contacting the chimeric Edg receptor of claim 37, 38, 39 or 40 with a compound;

and

b) detecting binding of the compound to the chimeric Edg receptor thereby identifying a compound that binds the first Edg receptor.

42. (Previously presented) A method of screening for compounds that modulate the activity of an Edg receptor comprising:

a) contacting the chimeric Edg receptor of claim 37, 38, 39 or 40 with a compound;

and

b) detecting modulation of the activity of the chimeric Edg receptor relative to the activity of the chimeric Edg receptor in the absence of the compound, thereby identifying a compound that modulates the activity of the chimeric Edg receptor.

43. (Previously presented) The chimeric Edg receptor of claim 28, wherein second intracellular loop and the third intracellular loop of the first Edg receptor are replaced with the corresponding strands of the second Edg receptor.


44. (Previously presented) The chimeric Edg receptor of claim 28, wherein the second intracellular loop, the third intracellular loop, and the carboxy terminal strand of the first Edg receptor are replaced with the corresponding strands of the second Edg receptor.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to John D. Ulm whose telephone number is (571) 272-0880. The examiner can normally be reached on 9:00AM to 5:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Janet Andres can be reached on (571) 272-0867. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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